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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/727,972	11/30/2000	Rich Rogers	COMP:0084	5616

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EXAMINER	
ABDULSELAM, ABBAS I	
ART UNIT	**PAPER NUMBER**
2629	

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/727,972	ROGERS ET AL.	
	Examiner	Art Unit	
	Abbas I. Abdulselam	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 November 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. In view of the appeal brief filed on 11/09/05 PROSECUTION IS HEREBY REOPENED. As set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Kim (USPN 5181029).

Regarding claim 1, Kim teaches a user-configurable keyboard (see Fig. 1 (20)) comprising: a display configurable to display a plurality of icons; (LCD screen (70), icons may

be displayed within each of the designated areas, see Fig. 1 (70) and col. 3, lines 56-60) and a plurality of keys corresponding to the plurality of icons (an area on the LCD screen (70) is designated for each of the function key (50) so that each of the designated areas is proximate to the function key (50), see col. 3, line 44-48) and configurable to launch one of a software program (a program selector (80) is used to select the desired software program and a user may assign a specified series of keystrokes to a given function key. In PROGRAM mode, the user is able to define or reconfigure a function key using the appropriate keystrokes necessary to perform the desired functions, see col. 3, lines 64-66 and col. 4, lines 9-21).

Note that a keyboard template (10) (overlaid onto the computer keyboard (20)) is an integral part of the overall keyboard structure shown in Fig. 1

Also note that given the way the claim is written, the examiner considers only one of the last two limitations, and hence excludes the limitation stating "a Uniform Resource Locator corresponding to a respective icon".

Regarding claim 2, Kim teaches the display comprises a liquid crystal display (LCD screen (70), see col. 3, lines 56 and Fig. 1 (70)).

Regarding claim 3, Kim teaches the keys comprise function keys (the function keys (50), see col. 3, 45-46 and Fig 1(50)).

Regarding claim 5, Kim teaches the display comprises a plurality of windows, each window having at least one icon (icons may be displayed within each of the designated 50-pixel by 50 pixel areas on the LCD screen, see col. 3, lines 59-60).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (USPN 5181029).

Regarding claim 4, while Kim teaches an area on the LCD screen 70, which is designated for each of the function keys 50 (col. 3, lines 40-47). Kim does not teach a display having a single window.

It would have been an obvious matter of design choice to make a single large area display screen 70, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art In re Rose, 105 USPQ 237 (CCPA 1955).

4. Claims 6-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg (USPN 6693626) in view of Kim (USPN 5181029).

Regarding claim 6, Rosenberg teaches a computer system (a haptic feedback interface system, see Fig. 1 (10)) comprising: a console comprising a central processing unit configurable to execute software routines; (a host computer (14), which includes a host microprocessor and which can be one of a variety of home video game console systems implements one or more host application programs, see col. 4, lines, 50-51, col. 4, lines 61-67 and Fig. 1 (14)) a monitor electrically coupled to the console and configurable to display icons corresponding to one of a plurality of software applications (display device 26 can be included in host computer 14, and the host application provides images to be displayed on display device 26 such that the display screen 26 can display images from a GUI or text window, see col. 5, lines 28-34 and Fig. 1 (14, 26)) and a keyboard electrically coupled to at least one of the monitor and the console,(keyboard device 12 is coupled to the computer 14 by a bus 22, see col. 4, lines 29-30 and Fig. 1 (12, 14, 22))

Rosenberg does no teach "the keyboard comprising: a display configurable to display a plurality of icons; and a plurality of keys corresponding to the plurality of icons and configurable to launch one of a software program".

Kim on the other hand teaches an electronic keyboard template 10 integrated with computer keyboard 20 that include LCD screen (70) which is designated for each of the function key (50) such that the user is able to define or reconfigure the function key using the with respect

to a program selector (80) in order that the desired functions are performed (see col. 3, lines 22-67, col. 4, lines 1-29 and Fig. 1 (50, 70, 80).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace Rosenberg's keyboard (12) shown Fig. 1 by Kim's integrated keyboard-template structure shown in Fig. 1 because the integrated keyboard-template structure is useful in adapting the function keys for a user specified set of operations as taught by Kim (col. 2, lines 10-16).

Regarding claim 7, Rosenberg teaches the console is coupled to a network (host computer system 14 can be a "network-" or "internet-computer", see col. 4, lines 53-69).

Regarding claim 8, Rosenberg teaches the console is coupled to the Internet (host computer system 14 can be used with respect to a "network-" or "internet-computer", see col. 4, lines 53-69).

Regarding claim 9, Rosenberg teaches the system as comprising a mouse (mouse 30 can be connected to the host computer (14), see col. 5, lines 36-37 and Fig. 1(30)).

Regarding claim 10, Rosenberg teaches the keyboard is electrically coupled to the console through a universal serial bus cable (keyboard device 12 is coupled to host computer system 14 by, Universal Serial Bus USB, see col. 14, lines 10-15).

Regarding claim 11, Kim teaches the display of the keyboard comprises a liquid crystal display (LCD screen (70), see col. 3, lines 56 and Fig. 1 (70)).

Regarding claim 12, Kim teaches the keys on the keyboard are function keys (the function keys (50), see col. 3, 45-46 and Fig 1(50)).

Regarding claim 13, Kim teaches the display comprises a single window having a plurality of icons ((LCD screen (70), see col. 3, lines 56 and Fig. 1 (70)), design choice).

Regarding claim 14, Kim teaches the display comprises a plurality of windows, each window having at least one icon (icons may be displayed within each of the designated 50-pixel by 50 pixel areas on the LCD screen, see col. 3, lines 59-60).

Regarding claim 15, Rosenberg teaches a method of configuring a keyboard (manipulatable keyboard 12, see col. 3, lines 55-60 and Fig. 1 (12)) comprising the acts of: (a) selecting an icon from a system monitor, (display screen 26 displays images of a game environment, operating system application, simulation, etc. See col. 13, 63-65 and Fig. 6 (26)) the icon corresponding to one of a software application (the computer displays "graphical objects" or "computer objects," which are logical software unit collections of data that may be displayed as images on a display screen, see col. 5, lines 14-19) (b) transmitting the icon from the monitor to a keyboard; (keyboard device 12 is coupled to host computer system 14 which includes a display device 26, by a bidirectional bus, the bi-directional bus sending signals in

either direction between host computer system 14 and the Keyboard device, see col. 14, lines 7-15)

Rosenberg does not teach displaying the icon on the keyboard.

Kim on the other hand teaches screen LCD (70) extending above function keys (50) as shown in Fig. 1(col. 3, lines 40-41).

It would have been obvious to one of ordinary skill in the art at the time the invention wad made to modify Rosenberg's keyboard device (12) shown in Fig. 6 to adapt Kim's display (70) as configured in Fig. 1 because mounting the display screen (70) on a keyboard device helps display icons representative of operations performed by function keys as taught by Kim (col. 2, lines 25-29)

Regarding claim 16, Rosenberg teaches act (a) comprises the step of selecting an icon from a website (computer system 14 can be used with respect to internet and World Wide Web, see col. 4, lines 54-65).

Regarding claim 17, Rosenberg teaches act (a) comprises the step of selecting an icon from an operating system window (host computer can be used with respect to windows operating system col. 4, lines 45-49).

Regarding claim 18, Rosenberg teaches the step of selecting an icon using a mouse (mouse 30 can be connected to the host computer (14), see col. 5, lines 36-37 and Fig. 1(30)).

Regarding claim 19, Rosenberg teaches placing the icon in a predetermined location on a system monitor (display screen 26 displays images of a game environment, operating system application, simulation, etc. See col. 13, 63-65 and Fig. 6 (26)).

Regarding claim 20, Rosenberg teaches the step of placing the icon in a keyboard configuration window on the system monitor (keyboard device 12 is coupled to host computer system 14 which includes a display device 26, by a bidirectional bus, the bi-directional bus sending signals in either direction between host computer system 14 and the Keyboard device, see col. 14, lines 7-15)

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Regarding claim 21, Rosenberg teaches the step of transmitting the icon from the monitor to a keyboard using a universal serial bus cable (keyboard device 12 is coupled to host computer system 14 by, Universal Serial Bus USB, see col. 14, lines 10-15).

Kim teaches the step of displaying the icon on a liquid crystal display (icons may be displayed within each of the designated 50-pixel by 50 pixel areas on the LCD screen, see col. 3, lines 59-60).

Regarding claim 23, Rosenberg teaches a method of launching one of a software application (a system (10) including a program implemented by the host computer (14), see col. 3, lines 54-60, and Fig. 1 (10,14)) comprising the acts of: (a) selecting an icon from a system monitor, (display screen 26 displays images of a game environment, operating system

application, simulation, etc. See col. 13, 63-65 and Fig. 6 (26)) the icon corresponding to one of a software application (the computer displays "graphical objects" or "computer objects," which are logical software unit collections of data that may be displayed as images on a display screen, see col. 5, lines 14-19) (b) transmitting the icon from the monitor to a keyboard; (keyboard device 12 is coupled to host computer system 14 which includes a display device 26, by a bidirectional bus, the bi-directional bus sending signals in either direction between host computer system 14 and the Keyboard device, see col. 14, lines 7-15)

Rosenberg does not teach displaying the icon on the keyboard; and (d) depressing a key on the keyboard corresponding to the icon.

Kim on the other hand teaches screen LCD (70) extending above function keys (50) as shown in Fig. 1(col. 3, lines 40-41).

It would have been obvious to one of ordinary skill in the art at the time the invention wad made to modify Rosenberg's keyboard device (12) shown in Fig. 6 to adapt Kim's display (70) as configured in Fig. 1 because mounting the display screen (70) on a keyboard device helps display icons representative of operations performed by function keys as taught by Kim (col. 2, lines 25-29)

Regarding claim 24, Rosenberg teaches act (a) comprises the act of selecting an icon from a web site (computer system 14 can be used with respect to internet and World Wide Web), see col. 4, lines 54-65).

Regarding claim 25, Rosenberg teaches act (a) comprises the act of selecting an icon from an operating system window (host computer can be used with respect to windows operating system col. 4, lines 45-49).

Regarding claim 26, Rosenberg teaches act (a) comprises the act of selecting an icon using a mouse (mouse 30 can be connected to the host computer (14), see col. 5, lines 36-37 and Fig. 1(30))

Regarding claim 27, Rosenberg teaches act (a) comprises the act of placing the icon in a predetermined location on a system monitor (display screen 26 displays images of a game environment, operating system application, simulation, etc. See col. 13, 63-65 and Fig. 6 (26)).

Regarding claim 28, Rosenberg teaches act of placing the icon in a keyboard configuration window on the system monitor (keyboard device 12 is coupled to host computer system 14 which includes a display device 26, by a bidirectional bus, the bi-directional bus sending signals in either direction between host computer system 14 and the Keyboard device, see col. 14, lines 7-15)

Regarding claim 29, Rosenberg teaches the act of transmitting the icon from the monitor to a keyboard using a universal serial bus cable (keyboard device 12 is coupled to host computer system 14 by, Universal Serial Bus USB, see col. 14, lines 10-15).

Regarding claim 30, Kim teaches act (c) comprises the step of displaying the icon on a liquid crystal display (icons may be displayed within each of the designated 50-pixel by 50 pixel areas on the LCD screen, see col. 3, lines 59-60).

Regarding claim 31, Kim teaches act (d) comprises the step of depressing a function key on the keyboard (LCD screen 70 with respect to multiple function keys 50, see col. 3, lines 40-55).

Regarding claim 32, Kim teaches act (d) comprises launching one of a software application and corresponding to the icon corresponding to the depressed key (a user may assign a specified series of keystrokes to a given function key. In PROGRAM mode, the user is able to define or reconfigure a function key using the appropriate keystrokes necessary to perform the desired functions, see col. 3, lines 64-66 and col. 4, lines 9-21).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following art is cited for further reference.

Akira et al. (Japanese Publication # 2000-107445) teaches displayable icons (601-603) which are made to correspond with keys on the input device

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abbas I. Abdulselam whose telephone number is 571-272-7685. The examiner can normally be reached on Monday through Friday from 9:00 A.M. to 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abbas Abdulselam

Examiner

Art Unit 2629

March 14, 2006

RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600